IN THE UNITED STATES DISTRICT COURT

FOR THE WESTERN DISTRICT OF OKLAHOMA

SEAN SMITH and CRYSTAL SMITH,	)	
	)	
Plaintiffs,	)	
	)	
-vs-	)	No. 5:17-CV-1302-D
	)	
CSAA FIRE and CASUALTY INSURANCE COMPANY,	)	
	)	
Defendant.	)	

DEPOSITION OF J. STEPHEN FORD, Ph.D, P.E.

TAKEN ON BEHALF OF THE PLAINTIFFS

IN OKLAHOMA CITY, OKLAHOMA

ON NOVEMBER 30, 2018

REPORTED BY: KASEY D. EGELSTON, CSR

floor joists.

Q Do you know if any of these floor joists are broken underneath this living room?

A Based on the -- on the elevation information contained in the Rimkus report, I think there's high probability that some of them are broken due to rot. That's basically what I said.

Q And in order to repair those broken floor joists, if you were going to repair this room, you would have to actually replace those floor joists; right?

A Typically, you would not. Typically, you would go in and what we would call sistering them, depending upon the extent of the rot. It depends upon some of the details, but effectively you would go in and remove enough flooring that you could get a joist that was long enough to sistering is effective. Just placing a new competent joist next to the damaged joist. There's lots of details that have to be worked out and whether you extend that new sister joist the full length or whether it was just a partial length and how you attach it. There's many details associated with that. But effectively sistering them if they're broken due to rot.

Q Well, due to anything?
A Correct.
Q If they're broken, it could be due to anything.
A If they were broken -- if they were overloaded, but typically floor joists would be broken due to some type of vertical load.
Q Sure.
A Or damage from, you know, again, excessive water there.
Q Yeah. Like if the bricks just fell over because of moisture or whatever and there was too much load, they would have fallen; right?
A Okay.
Q I'm sorry, if the vertical brick supports would have collapsed and people walk across this, then that could be a load that breaks them; right?
A Again, yes. But you have to remember that not all of the these joists are reenforced, so if the joist is broken, okay, and obviously if you lose vertical support, you know, due to -- due to a collapsed brick column, depending on whether the joist was broken at that location or depending upon whether the joist was damaged due to wood rot or there was load -- excessive load on the floor at

that location, but obviously, you know, lots of things, you know, could contribute to a problem occurring. A problem being either excessive deflection or actual breaking of the joist. Many things could create that. Typically they're associated with -- for floor joists at this level of structure, typically the issues are associated with either vertical load or damaged material, but loss of a vertical support would be one of those. And what I would call a supplemental support. Because, again, as I indicated, some of these joists, you know, span the full length don't have any kind of -- so that would indicate -- when you see a reinforced joist right next to a non-reinforced joint, reinforced being supplementally supported or whatever, then you -- that leads you to believe that there's been some issue in the past.

Q And if you go in to fix this and you're going to sister it, is the sister to code?

A Yeah, the design of the sister would be -- the sistering process would be governed by building codes, absolutely.

Q Do you know if in Cushing you can sister floor joists and it be to code? Or do you have to replace them?